

## Rethink the Business Case for Innovation

Tom Tiede; [tomtiede@fortna.com](mailto:tomtiede@fortna.com)

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Century City Conference Centre  
Cape Town, South Africa

**The Leading Event in Africa for Supply Chain Professionals**



40<sup>th</sup>  
annual  
conference

# Agenda

- The Fundamentals of Distribution
- The Prevailing Threat of the “Amazon Effect”
- The Business Case for Innovation
- Maturity of Innovative Technologies in Distribution
- Building a Persuasive Business Case for Executives

# The Fundamentals of Distribution



**RIGHT  
PRODUCT**



**RIGHT  
PLACE**

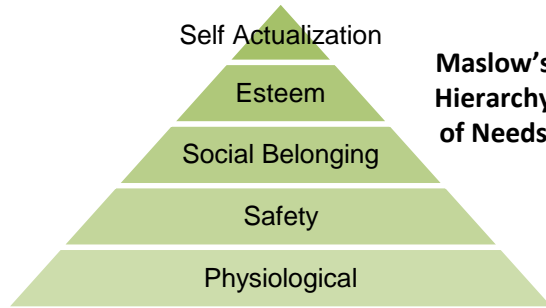


**RIGHT  
TIME**



**RIGHT  
COST**

## Fundamentally, The Right Product Means Filling a Customer Need



- **But, Competition and Customer Expectations Continue to Change.**
- **The “Right” Product Today Might Not Be the “Right” Product Tomorrow**
- **So, Companies Must Continually Adapt their Products and Services by:**
  - Listening to Customers
  - Capitalizing on Trends
  - Exploiting Gaps in the Market
  - Offering a Unique Value Proposition



# RIGHT PRODUCT



**“You can have any color you want, so long as it's black.”  
- Henry Ford**



**RIGHT  
PLACE**



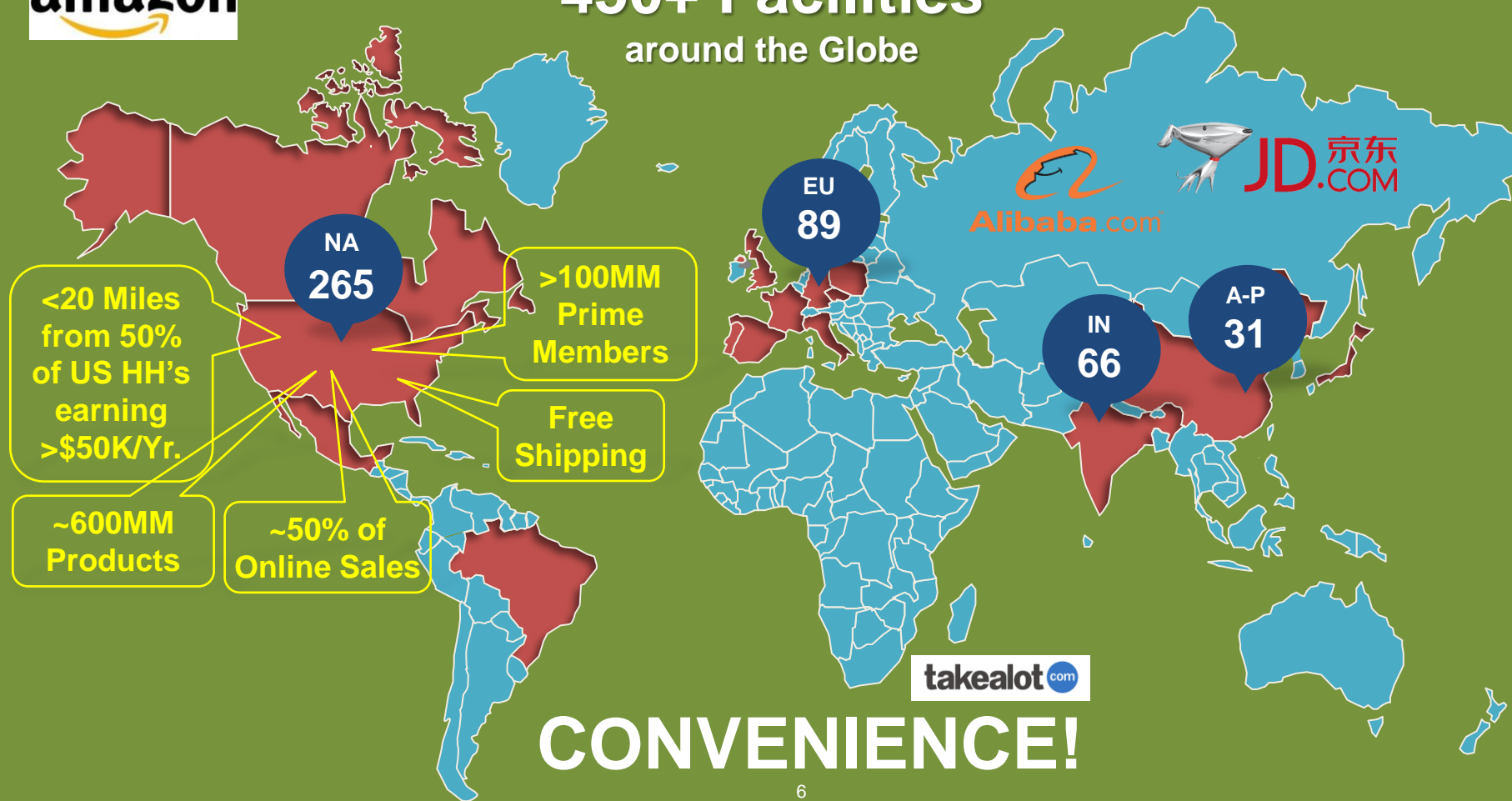
**RIGHT  
TIME**

**CONVENIENCE!**



# 450+ Facilities

around the Globe



# Death By Amazon



## Death by Amazon:

- Apparel Retail
- Sporting Good Stores
- Book Stores
- Electronics Stores
- ...Basically, many of the consumer goods available online...

## Amazon Survivors:

- Very Strong Brands
- Unique Products or Services
- Vibrant eCommerce Channel
- ...But, many are still lagging the overall financial market



## **Cost Will Always Be An Important Consideration, But...**

**...Companies Should Not Minimize the Investment in Distribution if it Constrains their Ability to:**

- Grow into New Markets and Sales Channels
- Offer New Services, or
- Compete

**Companies with the goal to win invest in innovation.**

**Those that don't either go away or become a shell of what they once were.**



# **RIGHT COST**

# Amazon buys robot maker Kiva for \$775m

Deal for North Reading company is 2d-largest by online retailer



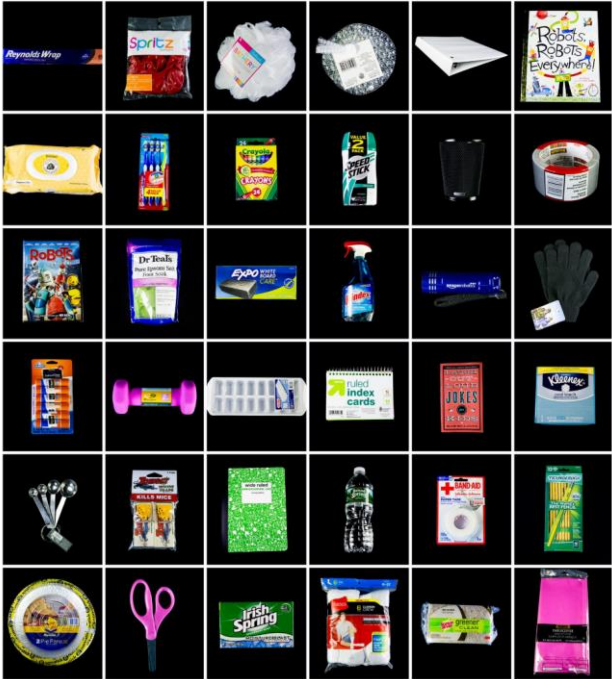
DAWGHAUSE PHOTOGRAPHY

Kiva Systems' robots shuttled merchandise around a Gilt Group distribution center in Shepherdville, Ky.

By **Hiawatha Bray** | GLOBE STAFF MARCH 20, 2012

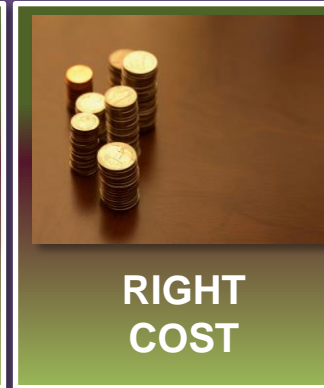
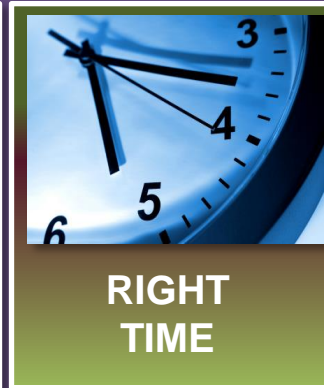
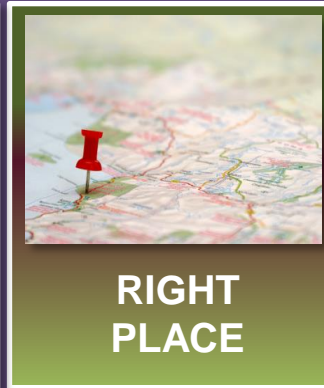
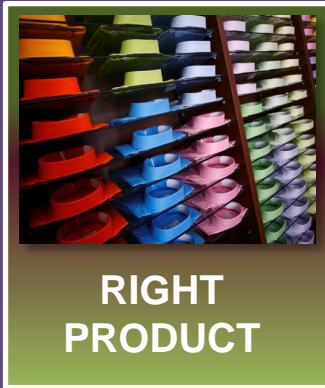
TOM SIMONITE BUSINESS 07.26.17 07:00 AM

# GRASPING ROBOTS COMPETE TO RULE AMAZON'S WAREHOUSES

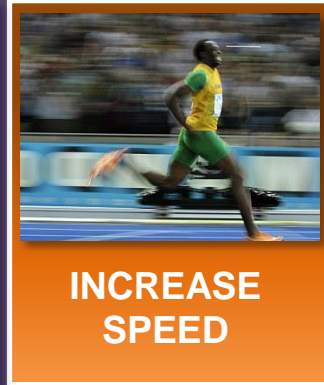
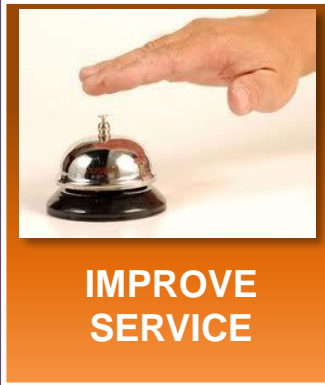


# The Business Case for Innovation

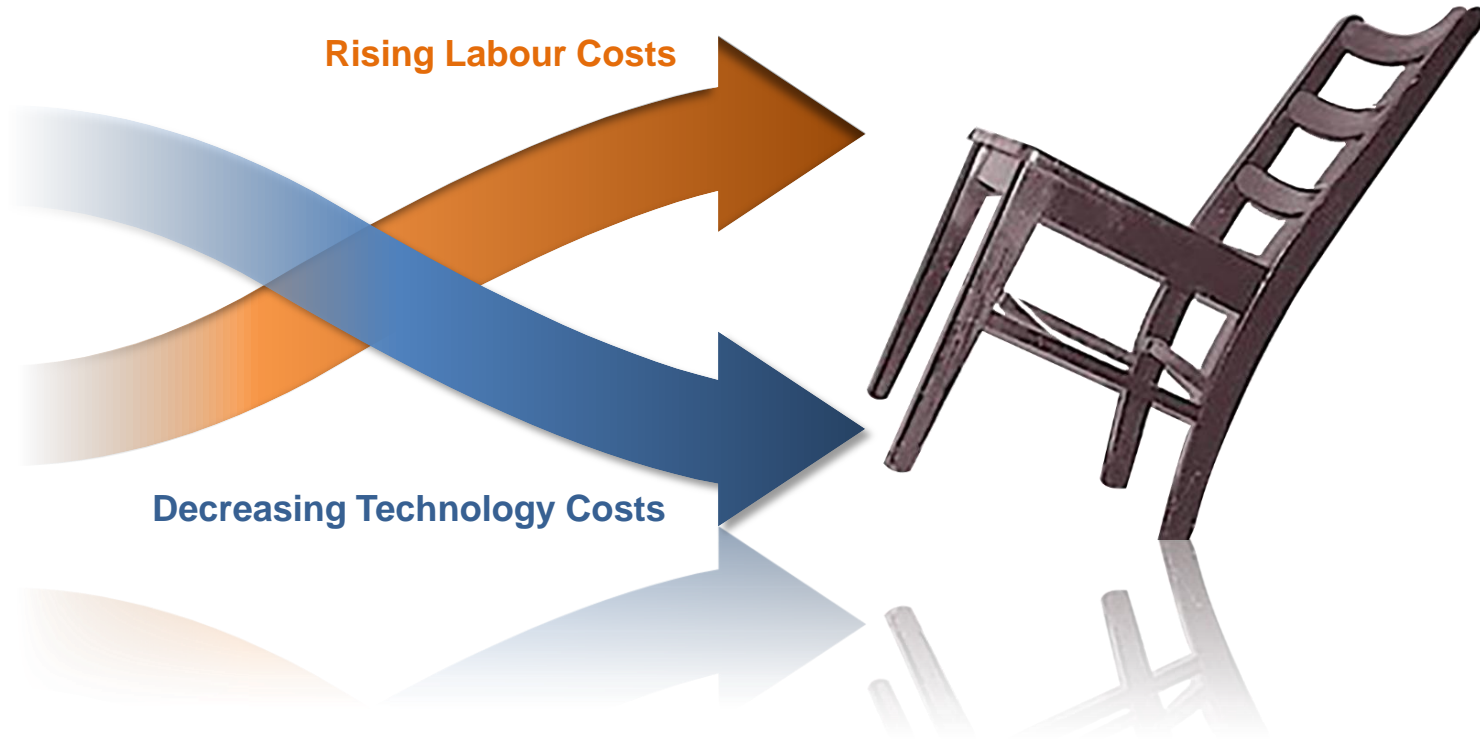
Provide



And



# Tipping Point for the Business Case for Innovation



# Maturity of Innovative Technologies in Distribution

<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Mature</b></p>  <p>Pallet Handling Systems – AS/RS, AGVs</p>  <p>Each Picking Systems - Vertical/ Horizontal Carousels</p>  <p>Carton &amp; Unit Sortation Systems</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Production</b></p>  <p>GTP - AS/RS shuttle &amp; crane systems</p>  <p>High Load - Self Driving Vehicles (SDVs)</p>  <p>Robotic Palletizers</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Initial Implementations</b></p>  <p>Small Load - Self Driving Collaborative Robots - CoBots</p>  <p>Exoskeletons for Heavy Lifting</p>  <p>Warehouse Execution Systems (WES)</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Pilot</b></p>  <p>Machine Learning &amp; Picking Bots</p>  <p>Drones for Inventory Control</p>  <p>Smart Glass Task Direction</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Conceptual</b></p>  <p>Augmented Reality</p>  <p>Autonomous Bots</p>  <p>Humanoid Bots</p>  <p>Terminator Bot?!</p>
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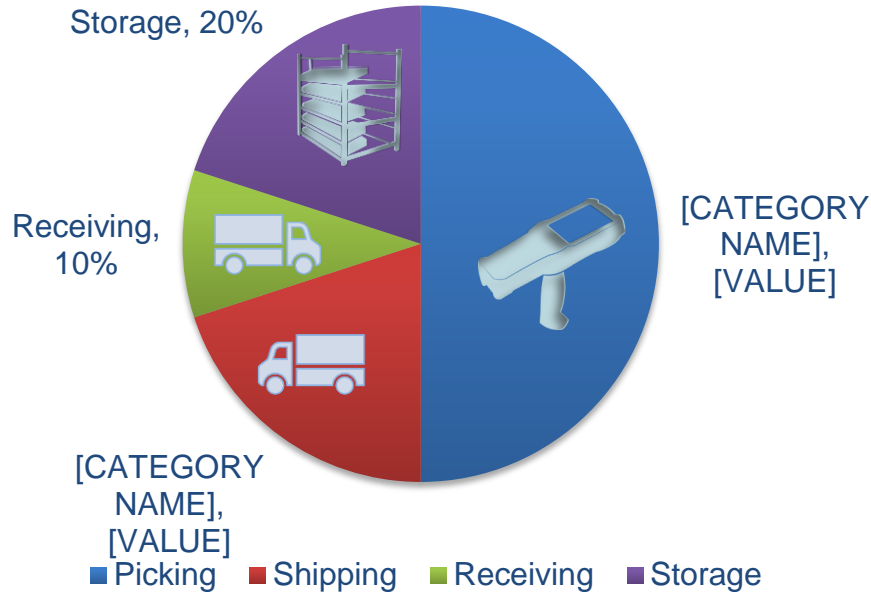
**Business Needs Should Determine Where to Focus Innovation...**



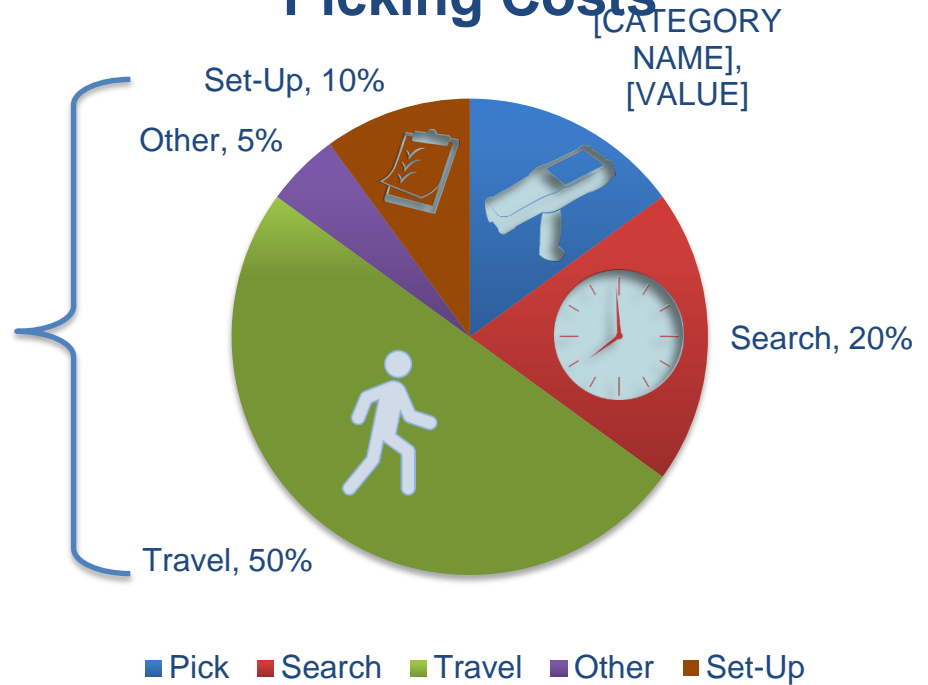
**...So, Identify the “The Burning Platform”**

# Taking Time and Cost out of Distribution

## Distribution Operations Costs



## Picking Costs

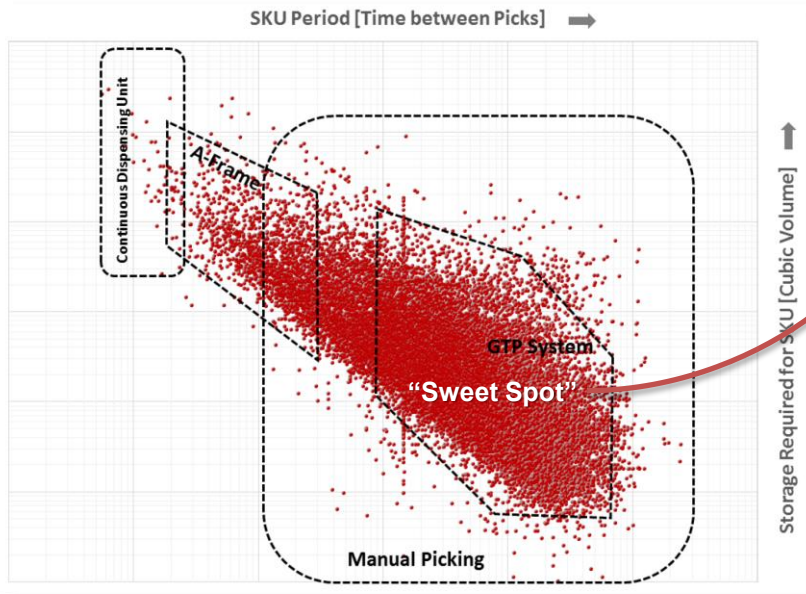


Note: Actual percentage of distribution operations costs will vary by company and industry

Source: Various (WERC, CSCMP, SD, Fortna Experience)

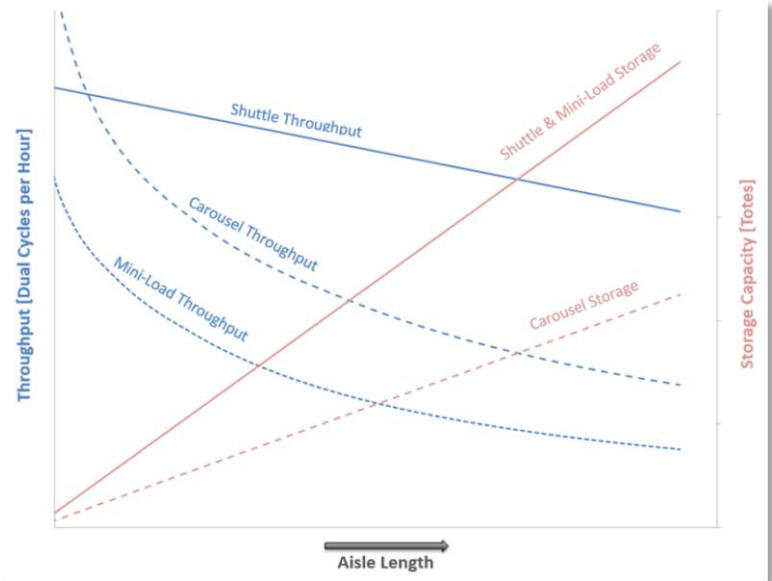
# Evaluate the Impact of Alternative Solutions

Determine “Sweet Spot” for Picking Solution  
(Illustrative Example)



An output from the Automated Fulfillment Optimizer™ illustrating a mapping of SKUs to relevant fulfillment approaches.

Goods to Person System Tradeoffs  
(Illustrative Example)



An illustration of the fundamental throughput and storage tradeoffs in carousels, mini-load, and shuttle-based systems as aisle length increases. This is supplemented with cost data not represented.



# Maximize the Business Case Equation

$$\text{Business Case} = \frac{\text{Value Created}}{\text{Investment Required}}$$

# Identify the Value of Alternative Solutions



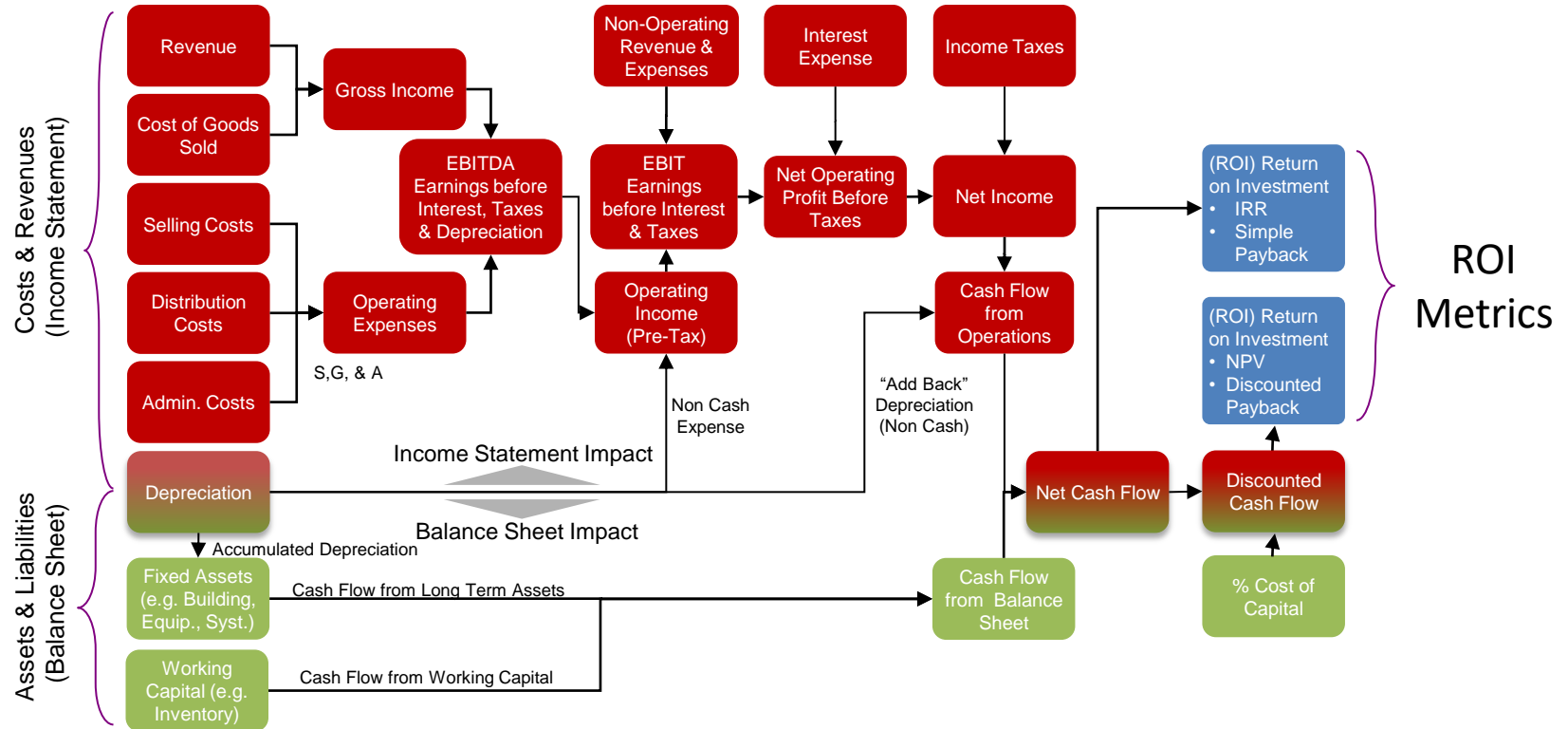
# Evaluate the Investment of Alternative Solutions

An investment can be considered as any type of commitment necessary to create value, most of which can be translated to monetary terms.

## Typical Investments

- Capital Assets
    - Systems
    - Equipment
    - Building
    - Inventory
  - Expenses
    - People
    - Supplies
    - Professional Fees
    - Travel Expenses
- Impact the Balance Sheet
- Impact the Income Statement

# Translate Value and Investment to Accounting Terms



# Determine the Return on Investment

(Illustrative Example)

Investment Life Span (Years)	Financial Analysis						
	0	1	2	3	4	5	Total
Cash Inflow	R0	R0	R150	R150	R150	R150	R600
Cash Outflows (Assumes Capital in Y0; Expense Y1)	(R200)	(R100)	R0	R0	R0	R0	(R300)
Net Cash Flow (Pre-Tax)	(R200)	(R100)	R150	R150	R150	R150	R300
Depreciation (5 Years)	R0	(R40)	(R40)	(R40)	(R40)	(R40)	(R200)
Net Operating Profit (Before Tax)	R0	(R140)	R110	R110	R110	R110	R300
Taxes (40%)	R0	R56	(R44)	(R44)	(R44)	(R44)	(R120)
Net Cash Flow (After Tax)	(R200)	(R44)	R106	R106	R106	R106	R180
Discounted Cash Flow* (using 10%)	(R200)	(R40)	R88	R80	R72	R66	R65
Net Present Value	R65						
Internal Rate of Return (IRR)	18.7%						

It's All About The Cash!

Accelerate or Not?

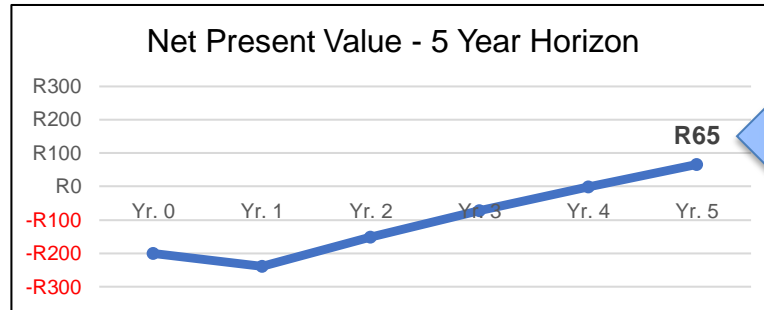
It's Actually About the Cash You Keep!

Time Value of Money

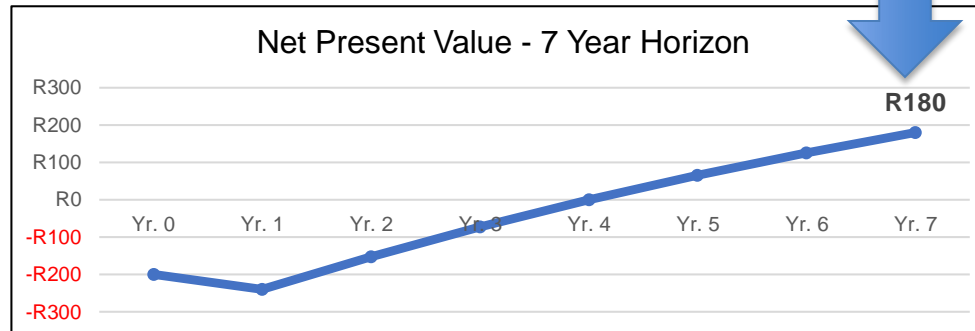
\*Also considered as the Present Value of after tax cash flow.

# Determine the Cash Flow Horizon

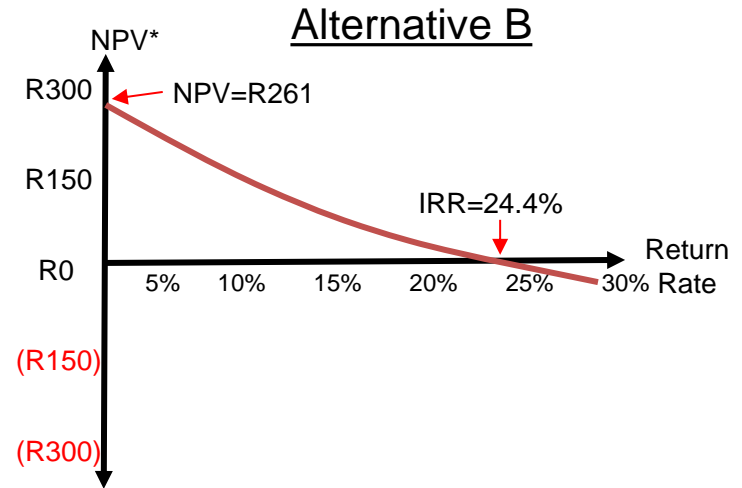
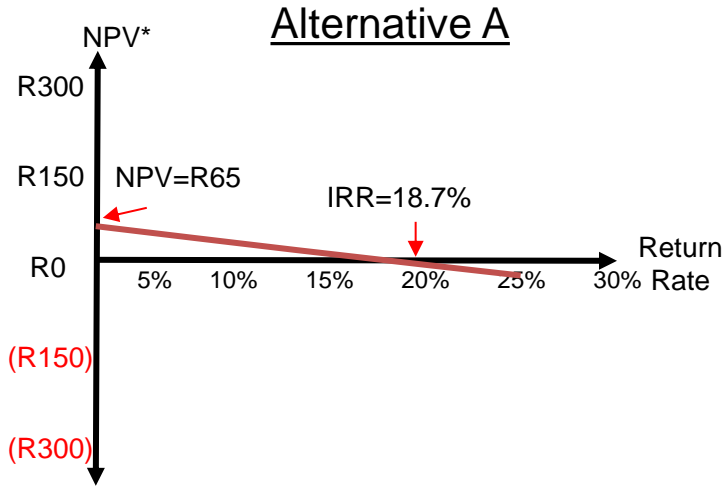
Generally, the longer the cash flow horizon the higher the return.



Same Alternative  
But, Different Horizon



# Compare the ROI of Alternative Solutions

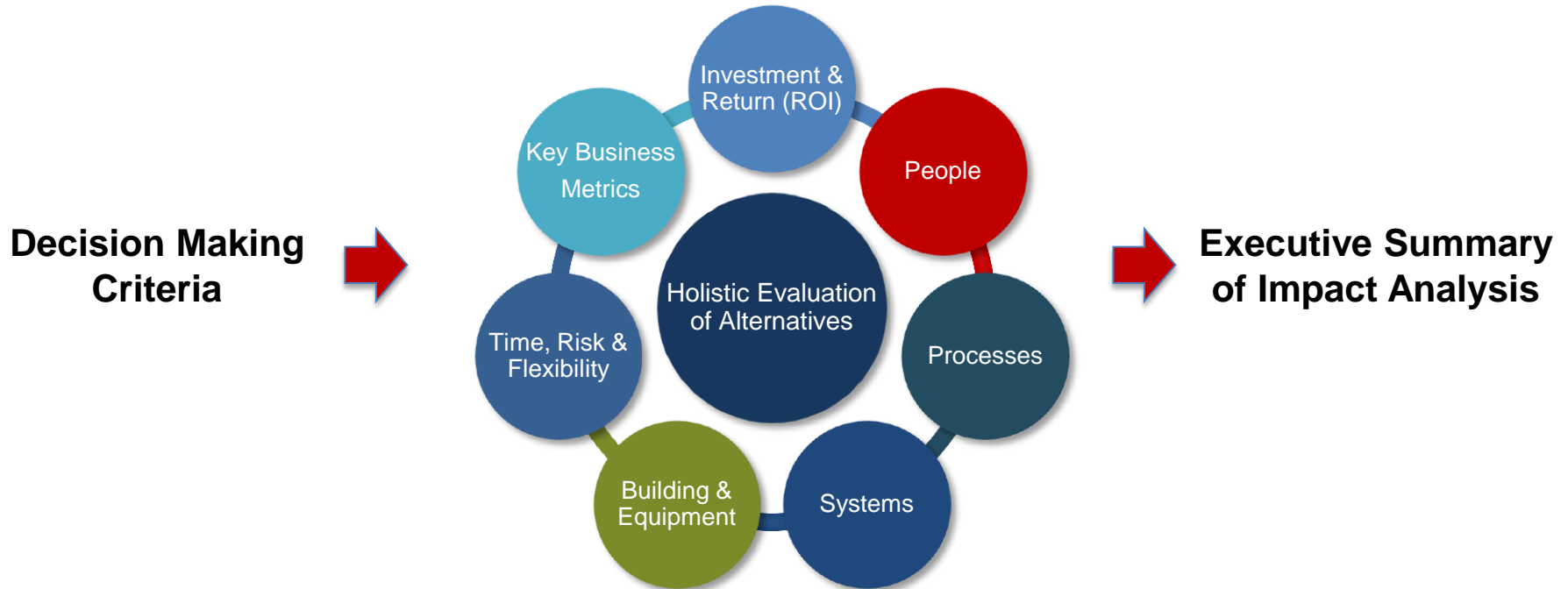


\*The assumed discount rate used for is example is 10%

Generally, the higher the return, the more favorable the Solution

# Assess and Compare the Impacts and Trade-offs

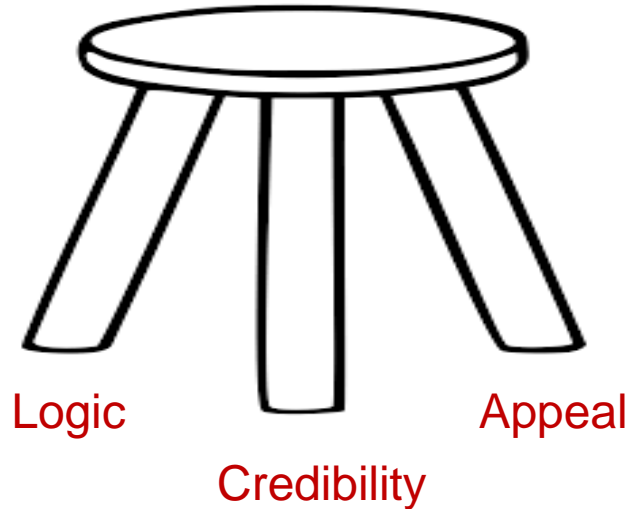
The “Right” Solution must find the right balance across multiple components and trade-offs





# Develop a Persuasive Argument for the Recommendation

## The “3 Legs” of a Persuasive Argument



A persuasive business case must be logical, credible, and appealing on a personal level to the decision maker(s). The “stool” will collapse if any single leg is weak or missing.

# Appeal to Both Sides of the Brain

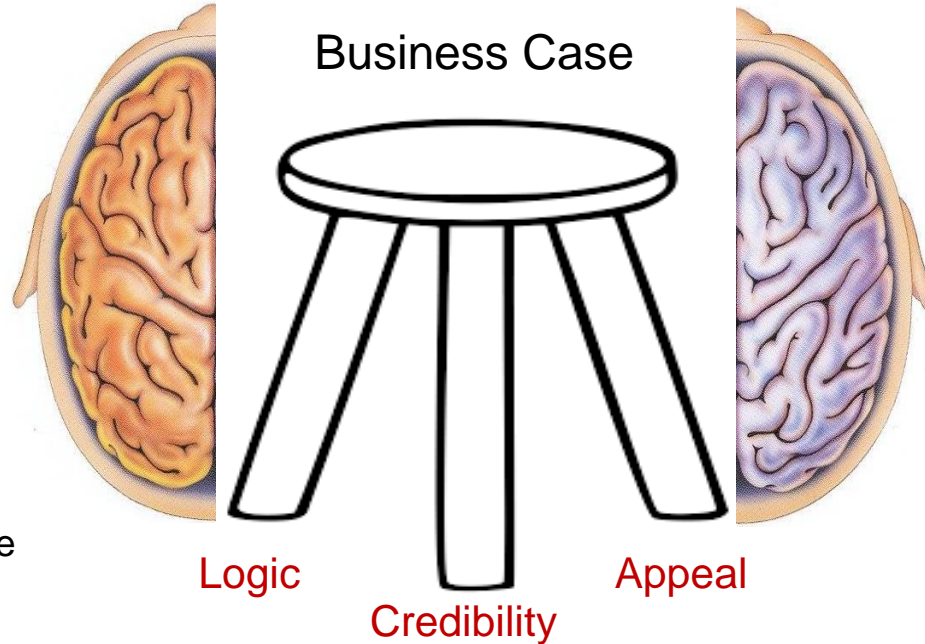
(Otherwise, the Stool will Collapse)

## Left Brain

Thinking  
Facts  
Logic  
Data Driven



Dominate Side when  
Rationalizing Decisions Made



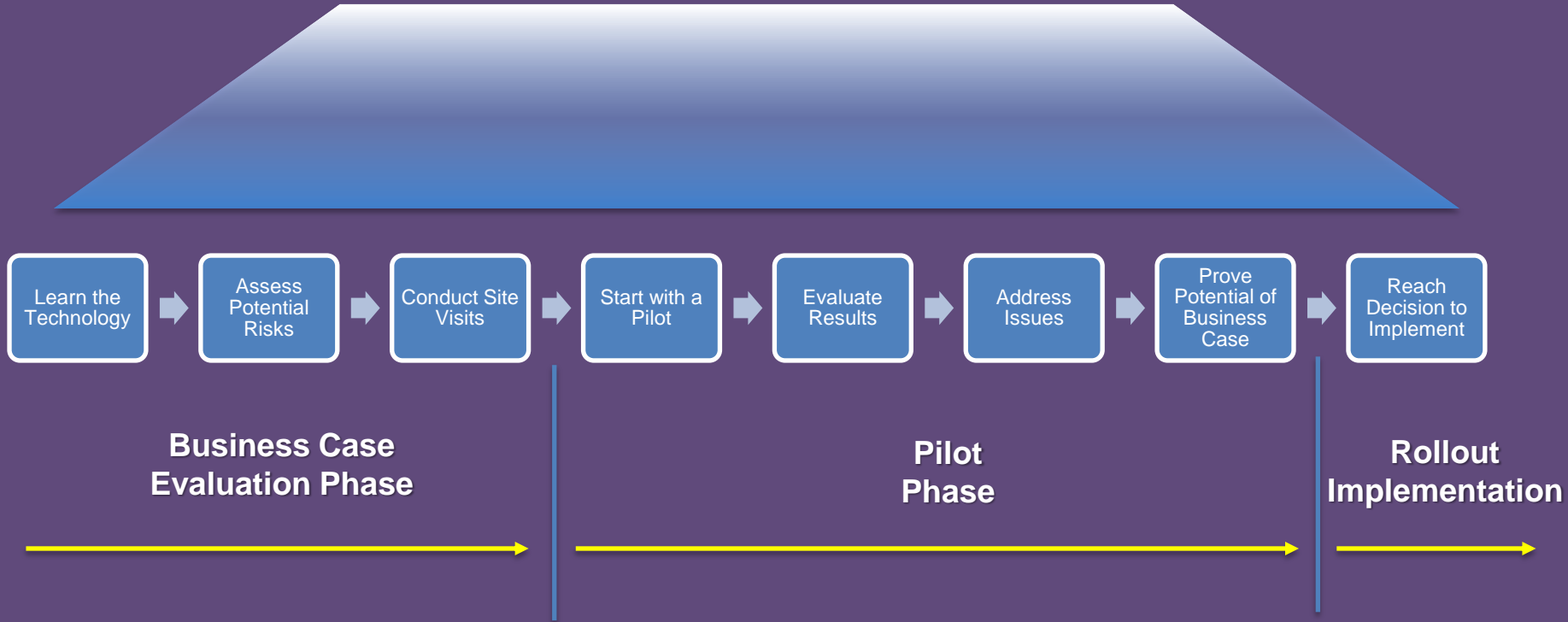
## Right Brain

Feeling  
Creativity  
Intuition  
Instinct Driven



Dominate Side when  
Making Decisions

# Develop a Plan to Manage Risk (example Pilot Approach)



# Conduct the Meetings before **THE** Meeting

The purpose is to validate the recommendation and avoid surprises at the final presentation meeting



# Best Practice is to Avoid Surprises

Client  
Decision Maker

“Former”  
consultant who  
failed to conduct  
the meetings  
before THE  
meeting. *RIP...*

# Prepare and Present the Business Case



fortna®

The Distribution Experts®

*Super Cool  
Client Logo*

**Business Case Presentation**

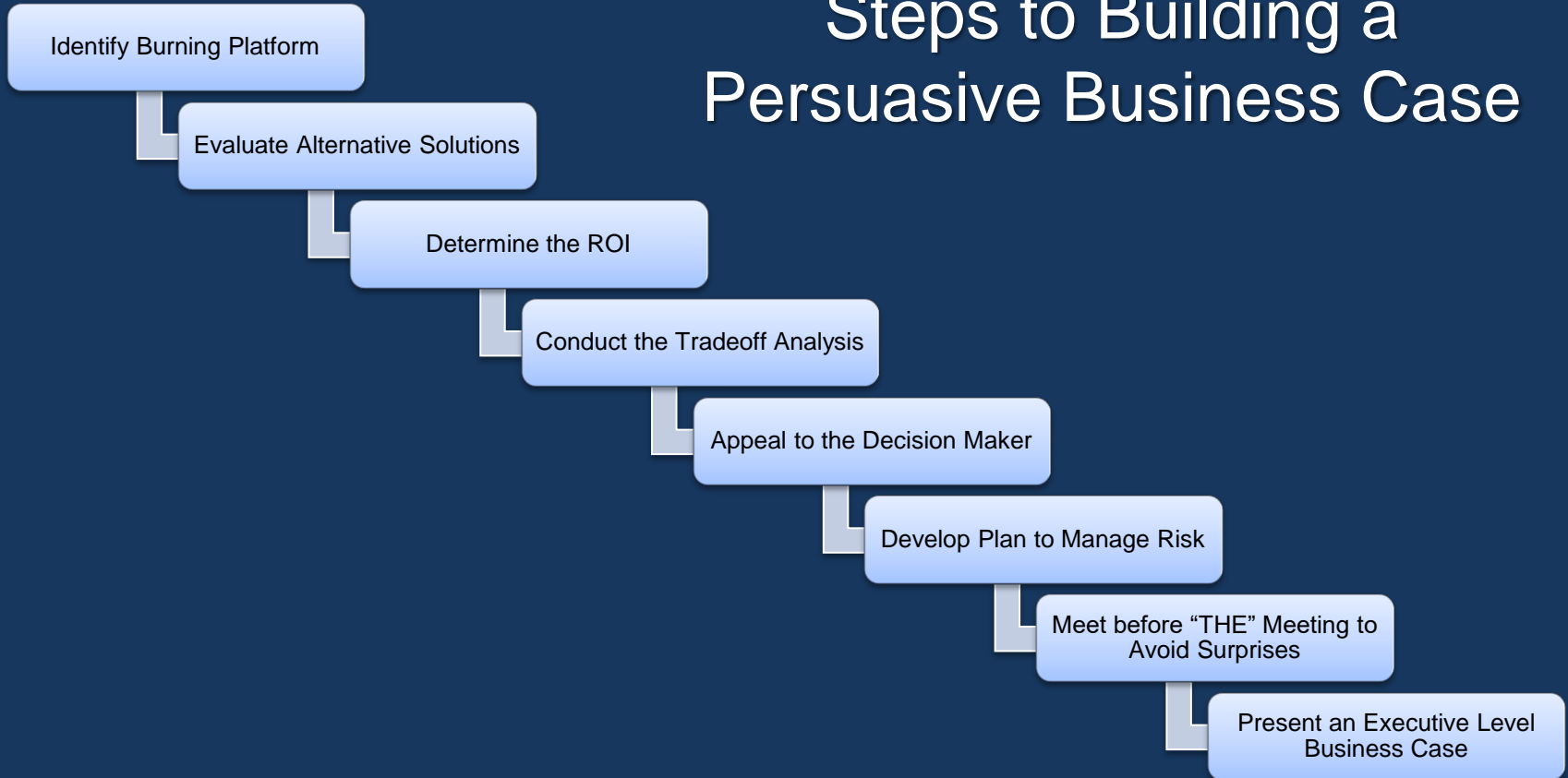
Executive Summary

June 11, 2018

## Sample Agenda

- Meeting Objectives
- Project Scope and Objectives
- Business Imperative/Burning Platform
- Alternative Approaches & Recommendation
- Impact and Tradeoff Analysis
- Financial Business Case
- Risk Management Analysis
- Implementation Timeline
- Next Steps

# Steps to Building a Persuasive Business Case



# Today's Summary

- The Fundamentals of Distribution
- The Prevailing Threat of the “Amazon Effect”
- The Business Case for Innovation
- Maturity of Innovative Technologies in Distribution
- Building a Persuasive Business Case for Executives



# Questions?

